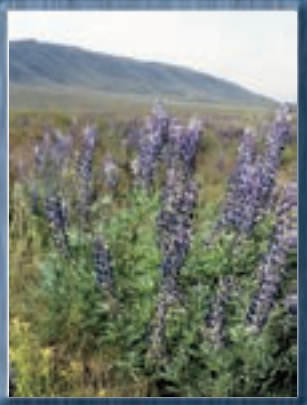

The Plateau

The plateau lies near the center of the Hanford Site and includes the 200 Areas and the 400 Area and is the location of Hanford's longer-term missions of waste treatment, storage and disposal operations.

Transition the Plateau

Fast Flux Test Facility

The Department of Energy directed Fluor Hanford to immediately begin deactivation of the Fast Flux Test Facility (FFTF) and to no longer maintain the restart potential of the FFTF. As a result, actions have been taken to shut down and secure unneeded systems and components. FFTF staff continued repairs and upgrades to fuel-handling systems that will be needed to remove stored fuel assemblies. FFTF personnel are testing the Closed Loop Ex-vessel Machine control system. Procurement and fabrication activities are in progress on the Solid Waste Cask repair and upgrade components.

A review of the plans for FFTF's deactivation and decommissioning has revealed opportunities to close the facility two decades earlier and at significantly lower cost. The review team recommended that Fluor Hanford identify a disposition path for slightly irradiated fuels and accelerate the 400 Area end-state determination to reduce programmatic and technical risk.

Electrician Doyle Dunlap (standing, above) and boilermaker Domingo Ramirez are installing the final end bell closure over the heater for sodium removal system tank T-101. Tank T-101 provides water to the sodium removal chamber for cleaning sodium residuals from the surfaces of fuel assemblies before they are packaged for storage.

Nuclear Material Stabilization

The purpose of the Nuclear Material Stabilization Project is to stabilize and package all remaining plutonium inventory, ship that inventory off-site, and ultimately demolish the Z-Plant, also known as the Plutonium Finishing Plant, to a slab on grade.

The progress of stabilization of plutonium solutions at the Plutonium Finishing Plant (PFP) continued to be good during the past quarter, resulting from the steady operation of the oxalic acid precipitation process and the successful completion of direct discard. PFP innovatively stabilized 1,000 liters of low-concentration plutonium solutions by simple absorption on a mineral sorbent and then shipped the mineral sorbents to the Hanford Central Waste Complex. This approach to solutions stabilization is called direct discard. In the second quarter, PFP has stabilized 88 percent by weight of the plutonium solution inventory and is on schedule to complete the stabilization of the plutonium solution inventory during the fourth quarter.

In the adjoining photos, PFP personnel are shown stabilizing the plutonium solution inventory using the direct discard method.

Nuclear Material Stabilization

Based on a testing program jointly conducted by Fluor Hanford and the Pacific Northwest National Laboratory, the Plutonium Finishing Plant was authorized to process the critical mass laboratory solutions in a series of gloveboxes using existing moisture measurement procedures. The testing program also resulted in changes in processing conditions that reduce the volume of the filter cake product. The reduced product volume resulted in a two-month schedule gain in solutions processing and a reduction in the cost of storing the product.

PFP completed all construction work for Project W-460 on a new 2736-ZB entry control facility (below), which adds a new layer of security to the vault and the stabilization and packaging equipment glovebox line. With the completion of the entry control facility, the construction project is proceeding toward administrative closure more than a year ahead of schedule and at a cost savings of $1 million.

Waste Management

The Hanford Waste Management Program supports the restoration of the Columbia River corridor and transition of the Hanford Site central plateau to a long-term operation by managing programmatic Hanford activities related to radioactive solid waste, liquid waste, and cesium and strontium capsules. Activities include retrieval, storage, treatment, processing and disposal.

Preparations continue for back-to-back 242-A Evaporator campaigns later this summer in support of the River Protection Project. Waste Management Project personnel completed a cold run of the facility to verify system operability and to maintain operating staff competency and certification. Liquid effluent treatment campaigns continued, supporting generator needs (including groundwater cleanup) and making storage space available to support the planned 242-A Evaporator campaigns.

Spent Nuclear Fuel Project Support

Project personnel completed the cleanout of a second T Plant cell to prepare for spent nuclear fuel sludge storage. Following cell cleanout, liner systems will be placed in the cells to allow compliant storage of spent nuclear fuel sludge containers. Receipt and staging of these cell liner systems is under way. Project personnel have staged several of the systems in the canyon. Readiness preparations for the movement of the Shippingport Fuel out of the canyon, in preparation for SNF sludge receipt, also continued.

Nuclear Material Stabilization Support

The Waste Management team accepts waste shipments from the Plutonium Finishing Plant into the Central Waste Complex for interim storage pending future processing or off-site shipment. This quarter, shipments of Hanford ash in pipe-overpack containers were completed. All of the off-site and Hanford ash has been shipped to the Central Waste Complex. The first 15 pipe-overpack containers of sand, slag and crucible transuranic waste were received from PFP.

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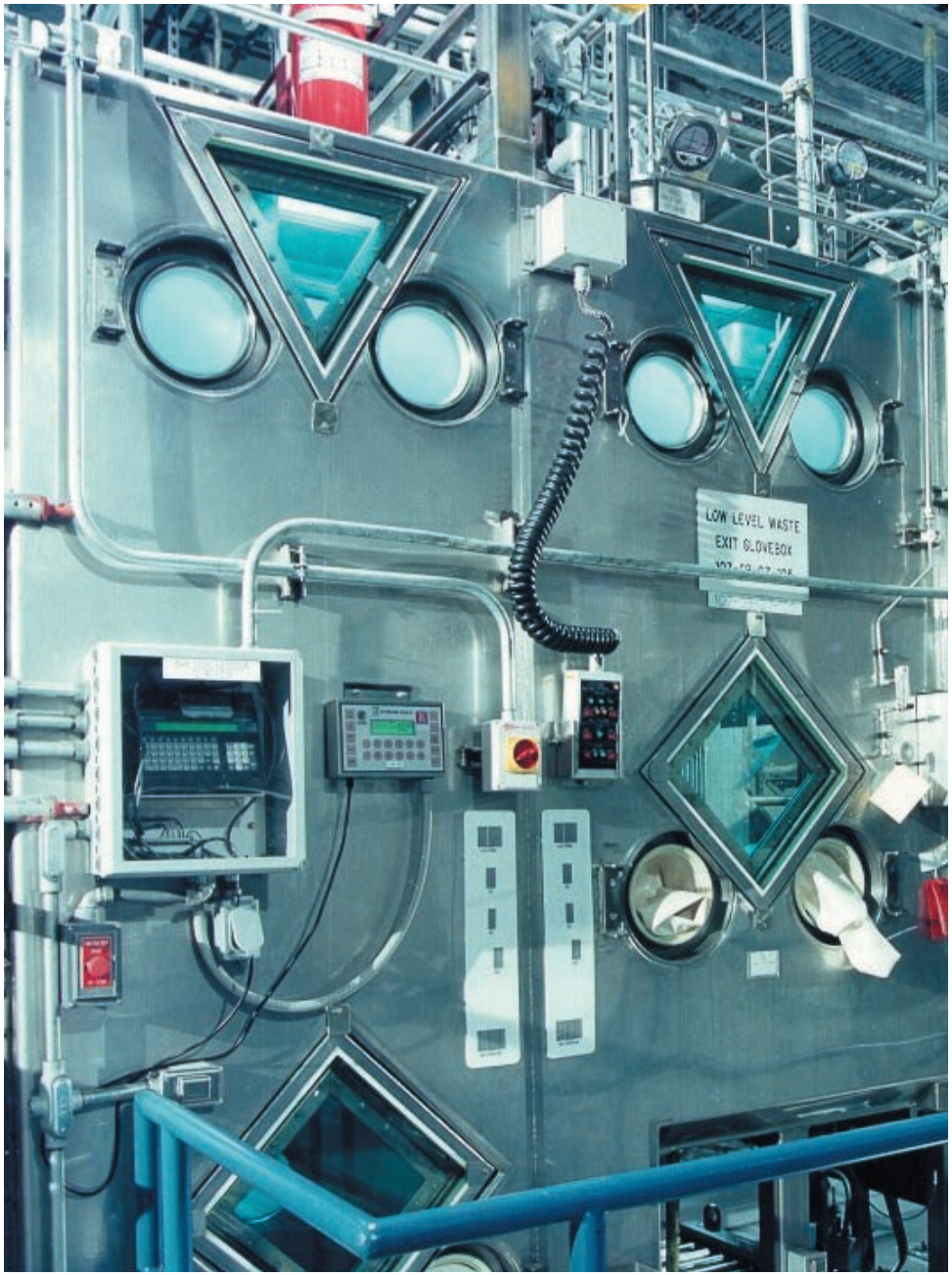

Transuranic Waste Program

The glovebox line for low-level waste is being modified at the Waste Receiving and Processing facility. This modification, partially funded through a DOE Office of Science and Technology program, will provide increased capability and reliability in transuranic waste processing activities at WRAP. This improvement will directly support acceleration of transuranic waste certification and shipment activities in FY 2003.

Environmental Restoration on the Plateau

Workers at the 233-S Plutonium Concentration Facility completed removal of all process vessels and piping in March, more than a year ahead of schedule. The 233-S facility is the first plutonium production facility to be decontaminated and decommissioned at Hanford. The plutonium concentration vessels were connected by about 4,500 feet of piping and electrical conduit. In the project's 4.5-year life, workers, such as the ones shown on this page, have made 11,500 entries into highly contaminated areas and airborne radioactivity areas with only six minor personnel contamination events, contributing to the outstanding safety record of the Environmental Restoration Contractor team, led by Bechtel Hanford, Inc.

What's Next in Transitioning the Plateau?

Update the detailed plans and schedule for FFTF deactivation. Initiate preparations for secondary sodium drain.

Complete readiness for Shippingport nuclear fuel movement from storage at T Plant.

Begin stabilization of plutonium-bearing polystyrene items called "polycubes" in the thermal furnaces at PFP.

Continue packaging sand, slag and crucible, which are residues that have low plutonium content, in pipe-overpack waste containers that are destined for shipment to the Waste Isolation Plant in New Mexico.

Initiate new activities using the Energy Secretary's accelerated cleanup funds to speed up the final demolition of PFP by seven years.

Complete construction of a waste staging area at the Environmental Restoration Disposal Facility.

Transition the Groundwater/Vadose Zone Integration Project, 233-S Plutonium Concentration Facility Decommissioning Project, Hanford Environmental Information Systems and other Central Plateau-related work scope to Fluor Hanford.